

**Amendments to the Specification:**

Replace the paragraph beginning at page 10, line 25 of the specification with the following amended paragraph:

The controller 230 can also include a calculating means 231 for converting the digital values read from the ADCs 220 into a measured cell voltage. Optionally, the calculating means is a separate component from the controller or is incorporated into another component. Optionally, the controller 230 is further connected to a computer 233, e.g., personal computer (not shown), via any known or future developed input-output format, e.g., serial port, parallel port, IEEE 1394 port, USB port, USB 2.0 port, or the like which can be used to provide enhanced data processing to monitor fuel cell performance. Also, the controller, optionally, includes a microprocessor, and/or is a stored-memory computer, i.e., the control functions are governed by a software application which is loaded in memory and processed on a general purpose microprocessor.

Replace the paragraph beginning at page 11, line 25 of the specification with the following amended paragraph:

As shown in FIG. 3, coupling C15 passes through laser-wafer trimmed resistors 310 and 315 and then is split to couple with 2 differential amplifiers 350 and 355. This is because in a cell stack the cathode of one cell is coupled to the anode of the connecting cell. Thus, except for the initial ~~an~~ and terminal cells in the stack, the each cell coupling will connect to one input each of 2 differential amplifiers. The outputs A16 and

A15 of differential amplifiers 350 and 355 are passed via a switching network (not shown, see FIG. 2) to ADCs (not shown, see FIG. 2).